

CLAIMS

1. A reduced set character entry system for an electronic appliance, said reduced set character entry system comprising:

a first set of at multiple keys, said first set of multiple keys representing a selected row of characters from a set of QWERTY style keyboard rows, each of said keys associated with a character of said selected row such that when any of said first set of multiple keys is actuated said associated character is input to said electronic appliance;

a second set of keys, at least one of said second set of keys actuated to change said selected row, and

an electronic appliance display, said display displaying the characters of said selected row.

2. A reduced set character entry system for an electronic appliance, as per claim 1, wherein said electronic appliance display additionally displays previously input characters.

3. A reduced set character entry system for an electronic appliance, as per claim 2, wherein, each of said first set of multiple keys comprises an electronic character display and input mechanism, said electronic character display retaining an image of an associated character of the selected row and said electronic appliance display retaining only said previously input characters.

1 4. A reduced set character entry system for an electronic appliance, as per claim 1, wherein said
2 electronic appliance comprises:

3 a top surface;

4 a bottom surface;

5 a plurality of side surfaces connecting said top surface and said bottom surface;

6 said electronic appliance display disposed on said top surface;

7 said first set of at least ten keys disposed on said top surface, and

8 said second set of keys disposed on one or more of said side surfaces.

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1 7. A reduced set character entry system for an electronic appliance, as per claim 1, wherein said
2 second set of keys comprises two keys, a first of said two keys actuated to change said
3 currently selected row to a row above said currently selected row and a second of said two
4 keys actuated to change said currently selected row to a row below said currently selected
5 row.

1 8. An electronic appliance including a housing having top and bottom surfaces and a plurality
2 of side surfaces connecting said top and bottom surfaces, said electronic appliance
3 comprising:

4 a first set of input keys located on said top surface, each of said input keys associated
5 with an individual character of a first subset of a set of input characters and actuation
6 of any of said input keys causing the character associated with said actuated input key
7 to be input to said electronic appliance;

8 at least one selection key located on one of said side surfaces;

9 a display located on said top surface, said display displaying said first subset of input
10 characters, and

11 wherein actuation of said selection key changes said first subset to a second subset so that
12 each of said input keys is associated with an individual character of said second subset and
13 said display is changed to display said second subset.

- 1 9. An electronic appliance including a housing having top and bottom surfaces and a plurality
2 of side surfaces connecting said top and bottom surfaces, as per claim 8, wherein said display
3 additionally displays previously input characters.
- 1 10. An electronic appliance including a housing having top and bottom surfaces and a plurality
2 of side surfaces connecting said top and bottom surfaces, as per claim 9, wherein said display
3 comprises a plurality of displays, a first display showing said previously input characters and
4 a second segmented display comprising each of said first set of input keys.
- 1 11. An electronic appliance including a housing having top and bottom surfaces and a plurality
2 of side surfaces connecting said top and bottom surfaces, as per claim 8, wherein one or more
3 of said first set of input keys is disposed on one or more of said side surfaces.
- 1 12. An electronic appliance including a housing having top and bottom surfaces and a plurality
2 of side surfaces connecting said top and bottom surfaces, as per claim 8, wherein said
3 characters comprise any of: alphabetic, numerical, kanji or kana.

1 13. An electronic appliance including a housing having top and bottom surfaces and a plurality
2 of side surfaces connecting said top and bottom surfaces, as per claim 8, said electronic
3 appliance further comprising:

4 at least one control key located on one of said side surfaces, and

5 wherein actuation of said control key causes said individual characters associated
6 with said input keys to shift between lower case and upper case alphabetic characters.

1 14. An electronic appliance including a housing having top and bottom surfaces and a plurality
2 of side surfaces connecting said top and bottom surfaces, as per claim 8, wherein said subsets
3 are rows of a QWERTY style keyboard layout.

4 15. A compact keyboard input device for an electronic appliance, said input device comprising:

5 a set of character input keys, said set less in number than an input character set, each
6 of said keys comprising an electronic character display and corresponding input mechanism;

7 each of said displays displaying an individual character of said input character set
8 associated with said display, actuation of said corresponding input mechanism causing said
9 displayed character to be input to said electronic appliance;

at least one selection key, and

wherein actuation of said selection key causes each of said displays to display a
different individual character of said input character set.

1 16. A compact keyboard type input device for an electronic appliance, as per claim 15, wherein
2 said electronic appliance has an output display, said output display displaying previously
3 entered characters.

1 17. A compact keyboard type input device for an electronic appliance, as per claim 16, wherein
2 said electronic appliance comprises:

3 a top surface;

4 a bottom surface;

5 a plurality of side surfaces connecting said top surface and said bottom surface;

6 said output display disposed on said top surface;

7 wherein one or more of said character keys and selection keys are disposed on one
8 or more of said side surfaces.

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12 18. A compact keyboard type input device for an electronic appliance, as per claim 15, said
13 input device further comprising:

14 a control key, and

15 wherein said control key switches said displayed characters between upper case and

16 lower case characters.

1 19. A compact keyboard type input device for an electronic appliance, as per claim 15, wherein
2 said input character set is any of: alphabetic, numeric, kanji, or kana.

- 1 20. An electronic appliance having an input/output device, said appliance comprising:
- 2 a display, said display displaying a selected set of input characters;
- 3 a wrist band connected to said display for securing said display to the wrist of a user;
- 4 a flexible assembly operatively connected to said display;
- 5 said flexible assembly having a set of character keys located thereon, each of said
- 6 character keys associated with an individual character of said selected set of input
- 7 characters and at least one control key, and
- 8 wherein actuation of any of said characters keys causes the character associated with said
- 9 actuated key to be input into said device and actuation of said control key causes said
- 10 currently selected set of input characters to be changed to a different set of input characters.
- 11 21. An electronic appliance having an input/output device, as per claim 20, wherein said flexible
- 12 assembly is pivotal from a position where said assembly extends substantially along and
- 13 underneath said wristband to a position substantially perpendicular to said wristband.
- 14 22. An electronic appliance having an input/output device, as per claim 20, wherein said
- 15 electronic appliance is a wristwatch.

1 23. A portable phone including a housing having top and bottom surfaces and a plurality of side
2 surfaces connecting said top and bottom surfaces and a reduced set character entry system,
3 said portable phone comprising:

4 a display located on said top surface;

5 an input assembly operatively connected to said portable phone;

6 said input assembly having a set of character keys located thereon, each of said
7 character keys associated with an individual character of a selected set of input characters,
8 and at least one control key, and

9 wherein actuation of any of said characters keys causes the character associated with
10 said actuated key to be input into said device and actuation of said control key causes said
11 currently selected set of input characters to be changed to a different set of input characters.

12 24. A portable phone including a housing having top and bottom surfaces and a plurality of side
13 surfaces connecting said top and bottom surfaces and a reduced set character entry system,
14 as per claim 23, wherein said input assembly is integrated with said portable phone, said
15 input assembly rotatable from a closed position where said input assembly is substantially
16 enclosed within said housing to a position where said character keys and said control key are
exposed for actuation.

1 25. A portable phone including a housing having top and bottom surfaces and a plurality of side
2 surfaces connecting said top and bottom surfaces and a reduced set character entry system,
3 as per claim 24, wherein said input assembly's axis of rotation is perpendicular to a plane
4 containing said side surfaces.

1 26. A portable phone including a housing having top and bottom surfaces and a plurality of side
2 surfaces connecting said top and bottom surfaces and a reduced set character entry system,
3 as per claim 23, wherein said input assembly is externally attachable to said portable phone.

1 27. An electronic appliance including a housing having top and bottom surfaces and a plurality
2 of side surfaces connecting said top and bottom surfaces and a reduced set character entry
3 system, said electronic appliance comprising:

4 an input assembly integrally connected to said electronic appliance;

5 said input assembly having a set of character keys located thereon, each of said
6 character keys associated with an individual character of a selected set of input characters,
7 and at least one control key;

8 said input assembly positionable in a first position where said input assembly is
9 substantially enclosed within said housing;

10 said input assembly positionable in a second position where said character keys and
11 said control key are exposed for actuation.

12 wherein upon positioning said input assembly in said second position, actuation of
13 any of said characters keys causes the character associated with said actuated key to be input
14 into said device and actuation of said control key causes said currently selected set of input
15 characters to be changed to a different set of input characters.

1 28. An electronic appliance including a housing having top and bottom surfaces and a plurality
2 of side surfaces connecting said top and bottom surfaces and a reduced set character entry
3 system, as per claim 27, wherein said assembly is positionable in said second position via
4 rotation of said assembly from said first position about an axis perpendicular to a plane
5 containing said plurality of sides.

1 29. An electronic appliance including a housing having top and bottom surfaces and a plurality
2 of side surfaces connecting said top and bottom surfaces and a reduced set character entry
3 system, as per claim 27, said electronic appliance further comprising a display located on
4 said top surface.

1 30. An electronic appliance including a housing having top and bottom surfaces and a plurality
2 of side surfaces connecting said top and bottom surfaces and a reduced set character entry
3 system, said electronic appliance comprising:

4 a first set of input keys located on a any of said side surfaces, each of said input keys
5 associated with an individual character of a first subset of a set of input characters and
6 actuation of any of said input keys causing the character associated with said actuated input
7 key to be input to said electronic appliance;

8 at least one selection key located on any of said side surfaces, and

9 wherein actuation of said selection key changes said first subset to a second subset
10 so that each of said input keys is associated with an individual character of said second
11 subset and said display is changed to display said second subset.

1 31. An electronic appliance including a housing having top and bottom surfaces and a plurality
2 of side surfaces connecting said top and bottom surfaces and a reduced set character entry
3 system, as per claim 30, wherein said electronic appliance is a portable phone.

1 32. An electronic appliance including a housing having top and bottom surfaces and a plurality
2 of side surfaces connecting said top and bottom surfaces and a reduced set character entry
3 system, as per claim 30, wherein said input keys and said selection key are located on
4 different ones of said side surfaces.

1 33. An electronic appliance including a housing having top and bottom surfaces and a plurality
2 of side surfaces connecting said top and bottom surfaces and a reduced set character entry
3 system, as per claim 31, wherein said input keys and said selection key are located on
4 different ones of said side surfaces.

1 34. An electronic appliance including a housing having top and bottom surfaces and a plurality
2 of side surfaces connecting said top and bottom surfaces and a reduced set character entry
3 system, as per claim 33, wherein said side surface having said input keys located thereon is
4 opposite to said side surface having said selection key located thereon.

1 35. An electronic appliance including a housing having top and bottom surfaces and a plurality
2 of side surfaces connecting said top and bottom surfaces and a reduced set character entry
3 system, as per claim 30, further comprising:
4 a display located on said top surface, and
5 wherein information displayed on said display is rotating to be in an orientation
6 appropriate for viewing by a user utilizing said input keys.

1 36. An electronic appliance including a housing having top and bottom surfaces and a plurality
2 of side surfaces connecting said top and bottom surfaces and a reduced set character entry
3 system, as per claim 30, wherein an equal number of input keys and selection keys are
4 located upon said first one and second one of said side surfaces, at least one key of said set
5 of input keys acting as a selection key and at least one selection key acting as an input key
6 as a result of switching between dominate hand modes.